§ 56.20-5 Marking (reproduces 107.2).

(a) Each valve shall bear the manufacturer's name or trademark and reference symbol to indicate the service conditions for which the manufacturer guarantees the valve. The marking shall be in accordance with MSS-SP-

§ 56.20-7 Ends.

(a) Valves may be used with flanged, threaded, butt welding, socket welding or other ends in accordance with applicable standards as specified in subpart 56.60.

§ 56.20-9 Valve construction.

(a) All valves must close with a right-hand (clockwise) motion of the handwheel or operating lever when facing the end of the valve stem. Gate, globe and angle valves must generally be of the rising-stem type, preferably with the stem threads external to the valve body. Where operating conditions will not permit such installations, the use of nonrising-stem valves will be Nonrising-stem permitted. lever operated valves, and any other valve where, due to design, the position of the disc or closure mechanism is not obvious shall be fitted with indicators to show whether the valve is opened or closed. Such indicators are not required for valves located in tanks or similar inaccessible spaces where indication is provided at the remote valve operator. Operating levers of the quarter-turn (rotary) valves must be parallel to the fluid flow in the open position and perpendicular to the fluid flow in the closed position.

(b) Valves of Class I piping systems (for restrictions in other classes refer to sections on low temperature service), having diameters exceeding 2 inches must have bolted, pressure seal, or breech lock bonnets and flanged or welding ends, except that socket type welding ends shall not be used where prohibited by §56.30–5(c) of this part, $\S 56.30-10(b)(4)$ of this part for the same pressure class, or elsewhere in this part. For diameters not exceeding 2 inches, screwed union bonnet or bolted bonnet, or bonnetless valves of a type which will positively prevent the stem from screwing out of the body may be employed. Outside screw and yoke design must be used for valves 3 inches and larger for pressures above 600 pounds per square inch gage. Cast iron valves with screwed-in or screwed-over bonnets are prohibited. Union bonnet type cast iron valves must have the bonnet ring made of steel, bronze, or malleable iron.

(c) Valves must be designed for the maximum pressure to which they may be subjected, but in no case shall the design pressure be less than 50 pounds per square inch gage. The use of wafer type resilient seated valves is not permitted for shell connections unless they are so arranged that the piping immediately inboard of the valve can be removed without affecting the watertight integrity of the shell connection. Refer also to §56.20-15(b)(2)(ii) of this part. Large fabricated ballast manifold connecting lines exceeding 8 inches nominal pipe size must be designed for a pressure of not less than 25 pounds per square inch gage.

(d) Disks or disk faces, seats, stems and other wearing parts of valves shall be made of material possessing corrosion and heat-resisting qualities suitable for the service conditions to which

they may be subjected.

(e) Plug cocks shall be constructed with satisfactory and positive means of preventing the plug from becoming loosened or removed from the body when the plug is operated. Cocks having plug locking arrangements depending on cotter pins are prohibited.

(f) Cocks shall be marked in a straight line with the body to indicate whether they are open or closed.

(g) Materials forming a portion of the pressure barrier shall comply with the applicable provisions of this part.

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by CGD 77-140, 54 FR 40604, Oct. 2, 1989; CGD 95-012, 60 FR 48050, Sept. 18, 1995]

§56.20-15 Valves employing resilient material.

(a) A valve in which the closure is accomplished by resilient nonmetallic material instead of a metal to metal seat shall comply with the design, material, construction and testing for valves specified in this part.

(b) Valves employing resilient material shall be divided into three categories, Positive shutoff, Category A,